RG104 E-1 Box 171

To the Engineer of the Mint in Peru.

The Philadelphia Mint wishes to have a plan explanatory and all the necessary datum in order to construct the machinery that is used in filing pieces that they have in excess of weight and to know the name of the constructor or inventor of the apparatus.

RG104 E-1 Box 171

Lima, July 1st 1891.

No-222-

Our Minister Plenipotentiary in Washington writes me with date of June 9th 1891 No-55- the following.

Wishing to profit by my stay in this country for the benefit of ours, and arranging the time necessary to know and study the Mint in Philadelphia I made a special trip to that City and proceeded to follow out my purpose.

Just and well merited is the fame of that establishment. You may see in it the greatest order, its machinery is very good and the work of coining is executed perfectly.

I was shown special attention by the Supt. who said to me, in order to form an exact and complete idea of the different departments, it is necessary to put you in the charge of the Chief of each Department.

In the melting room they were busy melting copper, only in order to coin cents, but the mechanism is exactly similar to that used in making silver. The furnaces are simple and according to the opinion of the men who manage them are the best that exist to-day. Unfortunately there are only a few of these as the manufacturer is dead. Nevertheless they have offered me the designs and the rest of the necessary datum if I wish to have them.

The coining room has powerful machinery and more than in ours, but they are similar in the principal. Each one can coin eighty dollars per minute and all of them three millions per month.

There are several simple apparatus which facilitate the work, but they need others which we have that are better than those used there.

They have requested that I would transmit the datum necessary for adapting them and I have offered to do it.

They have no refining room for separating the gold from paste and there are no other rooms of note.

I think that our mint compares favorably with that of the U. S. except in the proportion of its work and the great principal they have of arranging it, for example— they have ingots of gold worth three millions of dollars deposited, in order to coin when necessary.

With a little effort in order to establish a refining room and adopting some reforms of easy execution Peru would have one of the

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best establishments of the kind, in proportion to its conditions.

I have agreed to remit to them the datum necessary, relative to the request they made me, the Mint here sending me others that I have formulated. This exchange I find not only profitable but honorable to the country.

I send to you the adjoined request which ought to satisfy the Engineer of our establishment; hoping that you will have the goodness to impart the orders that he may be satisfied.

I transmit to you for your knowledge the written request referred.

Signed

Alberto Elmore

Lima, July, 8th 1891

Pass to the Director General of Industry in order that he will inform you about the request.

Lima, Aug. 4th 1891.

Give him all the information he desires.

Lima, Aug. 26th 1891

The Engineer will inform you.

RG104 E-1 Box 171

Mr Director:

The machine for filing disks that is used in the Mint at Lima was invented by Senor Carlos Southwell, who was engineer of that establishment.

This apparatus consists, as you see in the annexed design No I of a top running wheel to which is fixed a circular box A with a movable lid B, within which turns an emery stone C with the necessary velocity.

The lid carries a guide D held firm and on this guide is placed a circular conductor E that corresponds with the diameter of the disks to be filed. This conductor can move longitudinally and fixes itself in the position convenient for the nut F.

The end of the conductor which is at the side of the stone terminates in a thin plate a. b. c. d. on whose lower side, that is to say, on the side next to the stone, is found fixed a little plate of steel a. b. c. e. of a thickness equal to that of the disk. This last little plate is placed in a manner sufficiently near the stone, but not touching it, in which position it is secured by the nut F.

The disks that are to be filed are placed on the conductor E, the operator presses them against the stone with a circular piece

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of wood of the same diameter as the disks. As the stone turns in the direction of the arrow it is evident that whilst the pressure lasts the disk that is in contact with the emery is pushed and detained by the little plate of steel a. b. c. e. as soon as the operator stops pressing, it falls rolling over the incline plane e. f. immediately the disks are pushed by the operator and the face of the disk following remains in contact with the stone and so on.

In the bottom of the box A. is a tube T through which falls the filings of the silver which is produced by the emery.

The emery stones that have given the best results of the many that have been tried are those manufactured by "The Union Emery Wheel" with emery No. 40. The trademark is: "With this machine we can file one hundred disks per minute.

With the stone indicated the lines disappear with the pressure of the die, preserving the stones clean. From time to time the face is turned that it may be worked by a resistance by which its surface may be equal and plain.

The apparatus that is marked No. 2. was invented by the writer, in order to file the disks on the edges and at the same time to preserve the faces intact. Only a rude apparatus

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was made to see if the desired result could be obtained and the trial although by an imperfect model was satisfactory. This file consists of two wheels of emery A of the same diameter, placed face to face as indicated in the design.

The same belt moves both making them turn equally. A tube or pipe of steel or gun-metal B of the diameters of the disks, letting them pass gently are found supported by the two columns G. This has in the centre three grooves, two at the sides that let the stones enter in a manner that their periphery will be tangent to the circumference of the tube; in the upper groove enters a longitudinal piece D and its penetration is regulated by the pressure of the screws T. in a manner that compresses the disks when they are pushed across the tube, against the face of the emery.

Moreover, as the revolving movement of the two stones tends to make the disk turn in the same way, which if it were not made exactly would not file the disks, by the friction of said piece D. the rotation is interfered with, letting them turn notwithstanding, but with less relative velocity, which permits the emery to strike all its outlines equally.

On one side and the other of the columns the tube B is continued, but open at the top in order to be able to place and retire the disks. In the ends of the tube enter two little rods E. F. that terminate in two pieces G. that can turn freely, but the little rods have only a longitudinal movement and do not turn because they are hindered by a forelock key and a channel cut the length of their under part. The rod at the right E. pushes the disks that are to be filed, and are placed on the open tube on the same side. The rod on the left terminates in a piece which is found introduced in the bottom of the tube detaining the face as it enters against the emery. This rod is pushed from left to right by a spring and as the disks are pushed on entering from right to left, they remain detained between the two pieces G that turn with them, so the disks are obliged to pass over the emery with greater or less rapidity, according to how much you wish them to lose in weight thirty to forty disks at a time.

In order to prevent the left rod from coming ~~out~~ back, pushed by the disks, its upper face carries teeth and a spring with nail enters in them while it is pushed.

It can also be adopted to give two passages to the disks, one entering and the other going out, in which case the rod on the left will be arranged in a manner to go out.

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through the action of a spring as m.n.

The accompanying designs are only half the natural size.

Signed

Juan C. Griew.

Lima. Sept. 14th 1891

Lima, Sept. 18th 1891

This direction reproduces the said information from the Engineer of the House.

Signed -

B. Morales -

Lima, Sept. 19th 1891 -

Send the corresponding note to the Minister of the Exterior

Signed -

Carbajal -

NARA RG104, Entry 1, Box 171

[Letter One:]

To the Engineer of the Mint in Pern.

The Philadelphia Mint wishes to have a plain explanatory and all the necessary datum in order to construct the machinery that is used in filing pieces that they have in excess of weight and to know the name of the constructor or inventor of the apparatus.

[Letter Two:]

Lima, July 7, 1891

Our Minister Plenipotentiary in Washington writes me with date of June 9th 1891 too-55- the following.

Wishing to profit by my stay in this country for the benefit of ours, and arranging the time necessary to know and study the Mint in Philadelphia. I made a special drip to that City and proceeded to follow out my purpose.

Just and well merited is the fame of that establishment. You may see in it the greatest order, its machinery is very good and the work of coining is executed perfectly.

I was shown special attention by the Supt. who said to me, in order to form an exact and complete idea of the different departments, it is necessary to put you in the charge of the Chief of each department.

In the melting room they were busy melting copper, only in order to coin cents, but the mechanism is exactly similar to that used in making silver. The furnaces are simple and according to the opinion of the men who manage them are the best that exist to-day. Unfortunately there are only a few of them as the manufacturer is dead. Nevertheless they have offered me the designs and the rest of the necessary datum, if I wish to have them.

The coining room has powerful machinery and more than in ours, but they are similar in the principal. Each one can coin eighty dollars per minute and all of them three millions per month.

There are several simple apparatus which facilitate the work, but they need others which we have that are better than those used there.

They have requested that I would transmit the datum necessary for adapting them and I have offered to do it.

They have no refining room, for separating the gold from past and there are no other rooms of note.

I think that our mint compares favorably with that of the U.S. except in the proportion of its work and the great principle they have of arranging it, for example – they have ingots of gold worth three millions of dollars deposited, in order to coin where necessary.

With a little effort in order to establish a refining room and adopting some reforms of easy execution Pern would have one of the best establishments of the kind, in proportion to its conditions.

I have agreed to remit to them the datum necessary, relative to the request they made me, the Mint here sending me others that I have formulated. This exchange I find not only profitable, but honorable to the country. I send to you the adjoined request which ought to satisfy the Engineers of our establishment, hoping that you will have the goodness to impart the orders that he may be satisfied.

I transmit to you for your knowledge the writers request referred.

Signed
Alberto Elmore

Lima, July 8, 1891

Pass to the Director General of Industry in order that he will inform you about the request.

Lima, August 26, 1891

The Engineer will inform you.

[Letter Three:]

Mr. Director:

The machine for filing disks that is used in the Mint at Lima was invented by Senor Carlos Southwell, who was engineer of that establishment.

This apparatus consists, as you see in the annexed design No. 1 of a top running wheel to which is fixed a circular box A with a movable lid B, within which turns an emery stone C with the necessary velocity.

The lid carries a guide D held firm and on this guide is placed a circular conductor E that corresponds with the diameter of the disks to be filed. This conductor can move longitudinally and fixes itself in the position convenient for the nut F.

The end of the conductor which is at the side of the stone terminates in a thin plate a b c d on whose lower side, that is to say, on the side next to the stone, is found fixed a little plate of steel a b c e of a thickness equal to that of the desk. This last little plate is placed in a manner sufficiently near the stone, but not touching it, in which position it is secured by the nut F.

The disks that are to be filed are placed on the conductor E, the operator presses them against the stone with a circular piece of wood of the same diameter as the disks. As the stone turns in the direction of the arrow it is evident that whilst the pressure lasts the disk that is in contact with the emery is pushed and detained by the little plate of steel a b c e, as soon as the operator stops pressing, it falls rolling over the incline plane e f immediately the desks are pushed by the operator and the face of the disk following remains in contact with the stone and so on.

On the bottom of the box A is a tube T thought which falls the filings of the silver which is produced by the emery.

The emery stones that have given the best results of the many that have been tried are those manufactured by “The Amin Emery Wheel” with emery No. 40. The trademark is “With this machine we can file one hundred disks per minute.”

With the stone indicated the lines disappear with the pressure of the die, preserving the stones clean. From time to time the face is turned that it may be worked by a resistance by which its surface maybe equal and plain.

The apparatus that is marked No. 2 was invented by the writer, in order to file the disks on the edges and at the same time to pressure the faces intact. Only a crude apparatus was made to see if the desired result could be obtained and the trial although by an imperfect model was satisfactory. This file consists of two wheels of emery A of the same diameter, placed face to face as indicated in the design.

The same belt moves both making them turn equally. A tube or pipe of steel or un-metal B, of the diameter of the disks, letting them pass gently are found supported by the two columns G. This has in the centre three groves, two at the sides that let the stones enter in a manner that their periphery will be tangent to the circumference of the tube; in the upper grove enters a longitudinal piece D and its penetration is regulated by the pressure of the screws T in a manner that compresses the disks when they are pushed across the tube, against the face of the emery.

Moreover, as the resolving movement of the two stones tends to make the disk turn in the same way, which if it were not made exactly would not file the disks, by the friction of said piece D the rotation is interfered with, letting them turn notwithstanding, but with less relative velocity, which permits the emery to strike all its outlined equally.

On one side and the other of the columns the tube B is contained, but open at the top in order to be able to place and retire the disks. In the ends of the tube enter two little rods E F that terminate in two pieces G, that can turn freely, but the little rods have only a longitudinal movement and do not turn because they are hindered by a forelock key and a charmed, but the length of their under part. The rod at the right E pushes the disks that are to be filed, and are placed on the open tube on the same side. The rod on the left terminates in a piece which is found introduced in the bottom of the tube detaining the face as it enters against the emery. This rod is pushed from left to right by a spring and as the disks are pushed on entering from right to left, they remain detained between the two pieces G that turns with them, so the disks are obliged to pass over the emery with a greater or less rapidity, according to have much you wish them to lose in weight thirty to forty disks at a time.

In order to prevent the left rode from coming back, pushed by the disks, its upper face carries thuth [sic], and a spring with nail enters in them while it is pushed.

It can also be adopted to give two passages to the disks, one entering and the other giving out, in which case the rode on the left will be arranged in a manner to go out through the action of a spring as m n.

The accompanying designs are only half the natural size.

Signed
Juan C. Grievs

Lima, September 14, 1891

Lima, September 18, 1891

This direction reproduces the said information from the Engineers of the House.

Singed
B. Morales

Lima, September 19, 1891

Send the corresponding note to the Minister of the Exterior.

Signed
Carbajah